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EXPLORING COMPETITIVE ADVANTAGE OF SOCIAL NETWORKING SITES: A BUSINESS MODEL PERSPECTIVE

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Abstract

In an empirical study, we explore success factors of electronic business models by comparing how the two professional social networking sites (SNS) LinkedIn and Xing have achieved competitive advantage. Using the grounded theory method and a resource-based perspective, our interpretative case study employs the business models of the respective organizations as units of analysis. The resource-based view of the firm (RBV) proposes to explain competitive advantage. Hence, our study aims at revealing success factors that lead to competitive advantage by grounding them with unique resources and capabilities encompassed by the business model as well as pioneering advantages. To the best of our knowledge, this is one of the first studies taking an organizational perspective instead of a user perspective on the growth and success of social networking sites. Surprisingly, our results indicate that even in a digitized and globalized world where location didn't seem to matter anymore, location is still one of the major drivers for a successful social networking business. It is strongly linked with management resources and funding opportunities that enable different types of growth strategies for such digital start-ups.

Keywords: Social Networking Sites, Business Model, Competitive Advantage, Growth, Resource-based View, Interpretive, Case Study.

1 Introduction

At least since the beginning of the twenty-first century and the dissemination of the Internet, business models have been in the focus of academics and practitioners (Casadesus-Masanell and Ricart, 2010; Zott et al., 2011). With its rapidly growing, dynamic and competitive characteristics, business conducted via the Internet offered new avenues of value creation, which are able to "replace the 'old' way of doing things" (Zott et al., 2011, p. 12). Prominent examples are the success stories of social networking sites (SNS) such as Facebook, Myspace or LinkedIn. These revolutionary business models managed to be on par with a lot of the traditional industry giants in short time. However, no established theory is capable of fully explaining these new value creation potentials of such digital businesses (Amit and Zott, 2001). The business model framework addresses these issues (Pateli and Giaglis, 2004). It is centered around an organization, but with wider boundaries than the organization itself, which becomes meaningful in a digitized social world. This structural approach allows comparing companies applying similar business models more systematically (Al-Debei and Avison, 2010; Pateli and Giaglis, 2004). Despite the rising importance of SNS and the business model framework, there is little research about what constitutes such successful digital business models in the SNS context. Besides some conceptual works, only a few scholars focused on analyzing business model performance (Zott et al., 2011) and to the best of our knowledge there exist no insights from a resource-based perspective on the drivers of success for SNS. Hence, we explore the following research question through an interpretive and in-depth multiple case study on the prominent professional SNS of LinkedIn and Xing:

What are resources of social networking sites business models that lead to competitive advantage?

Competitive advantage is the exclusive position a firm is able to develop in a market as a consequence of resource deployments. To yield competitive advantage the development of a successful business model is not sufficient, as barriers for imitation are often low (Teece, 2010). Hence, business models are frequently associated with the resource-based view of the firm (RBV) (Al-Debei and Avison, 2010; Amit and Zott, 2001). The RBV suggests that the deployment of scarce resources can lead to sustainable competitive advantage (Barney, 1991). Apparently, the value of a business model increases while its resources and capabilities are inimitable, less substitutable as well as more productive with ongoing utilization (Amit and Zott, 2001; Peteraf, 1993). For the research paper at hand, the RBV provides us with the means to analyze the respective business models on success factors leading to competitive advantage and thus to superior performance.In the following, we lay out the theoretical basis of our work with focus on the business model framework, the RBV and network externalities. In chapter 4 we describe the research methodology and design applied in our study, followed by a detailed presentation of the findings in chapter 5 and 6. The research paper concludes by summarizing our main findings as well as providing directions for future research.

2 Fundamentals of Social Networking Sites Business Models

The "Business Model" is a relatively young concept, which gained in prominence during the dot.com boom (Osterwalder et al., 2005). A principal driver for this rising interest is originated in the evolution of the Internet (Zott et al., 2011). The digital economy provides organizations with opportunities to exploit novel forms of value creation (Zott et al., 2011). However, particularly for this new generation of companies (e.g., social networking sites) a well-developed business model became increasingly important in order to capture and deliver value (Teece, 2010). Traditionally, the concept belongs to the field of organizational management, but the challenges posed by the IT development and the rise of the Internet shifted attention to the area of e-business (Osterwalder et al., 2005). Amit and Zott (2001) mention that no established theory is capable to fully explain the value creation potential of social networking sites or e-businesses. The business model concept might be able to explain these new opportunities. For this work, we use the definition of Osterwalder et al. (2005). According to this highly accepted (Al-Debei and Avison, 2010; Steininger et al., 2011; Zott et al., 2011) work, the business model is "a conceptual tool that contains a set of elements and their relationships and allows expressing the business logic of a specific firm. It is a description of the value a company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams" (Osterwalder et al., 2005, p. 5). Since a business model is not restricted to a single firm, it might be also subject to imitation (Doganova and Eyquem-Renault, 2009). Its

elements are relatively transparent and often easy to replicate (Teece, 2010). As imitation is quite simple, business models that yield a sustainable competitive advantage have to incorporate activities that use resources with valuable, rare, inimitable and non-substitutable characteristics (Eisenhardt and Martin, 2000). The value associated with a business model increases when its resources are valuable, more difficult to imitate and less transferable (Amit and Zott, 2001). A lot of components in the business model framework are built on or related to the resource-based view (Al-Debei and Avison, 2010; Steininger et al., 2011). As we are leveraging Osterwalder et al. (2005)'s definition of the business model framework, we also use their fine-grained classification of business model components, which has been derived through a meta-analysis (Steininger et al., 2011). The core components are value proposition, customer, infrastructure management and financials. The value proposition is at the core of the concept and describes how a SNS can deliver value to its stakeholders. The customer component refers to the users and channels a SNS uses to reach its clients. Infrastructure management is closely linked to the resources a SNS can employ to create value. The financial component encompasses revenue models a SNS can employ (e.g., premium membership fee). According to the focus of our work on social networking site business models, we attach a strong emphasis on network externalities within the customer component. Network externalities are highly related to customer attraction for social networking sites (Sledgianowski and Kulviwat, 2009; Zott et al., 2011) and hence are an important factor for our analysis of SNS. Furthermore, it is important to mention that the components are interrelated (Hedman and Kalling, 2003).

Our work will focus on social networking site business models. This rising topic gained increasing popularity, leading to millions of users, with the beginning of the twenty-first century (Mislove et al., 2007). Contrasting the web, which focuses mainly on content, social network sites are organized around users (Mislove et al., 2007). Boyd and Ellison (2007, p. 211) define social networking sites as "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system". Those networks are usually public web platforms allowing their users to build up online presences in order to share content and collaborate with other users. Their key technology is rather consistent, but the focus or culture among social network sites differs. They can be related to different contexts, such as dating platforms, shared interests or work-related topics (Boyd and Ellison, 2007). Online social networking sites attract a tremendous amount of users. Users provide value to the network (Timmers, 1998) and companies operating networks try to exploit their member base for commercial activities. Social network sites experience strong positive network externalities. A network is more valuable the larger its user base and providers use this pattern to further establish their business model and sources of revenue (Zott and Amit, 2010)

3 The Resource-based View as a Theoretical Perspective on SNS

Literature on growth and success of social networking sites is very scarce. Nevertheless, some first results have been published by different authors. As our literature review shows, results are mainly user-centric and look at member loyalty (e.g., Lin, 2008), adoption behavior (e.g., Chang and Zhu, 2011), and network externalities or motivation (e.g., Lin and Lu, 2011) in SNS. To the best of our knowledge, they do not focus on the individual social networking sites' business model and resources from an organizational perspective. This might be explained through easier access to user than to internal firm data. From the resource-based perspective, competitive advantage is influenced by the company's internal resources rather than by its product market strategy. Hence, resources are seen as drivers of firm success (Wernerfelt, 1984). In this work, we define resources as "stocks of available factors that are owned or controlled by the firm" (Amit and Schoemaker, 1993, p. 35). They can be further classified into capabilities and assets. Capabilities differ from ordinary resources, as they are firm-specific, repeatable patterns that use resources to produce an output (Wade and Hulland, 2004). Capabilities provide value through the integration and use of resources (Liang and You, 2009). With the implementation of strategies that exploit these assets and capabilities under the control of the firm, it is able to achieve a competitive advantage. This can be sustained when competitors are unable to reproduce the benefits of the value creating strategy that yield to the advantage (Barney, 1991). Not every resource qualifies to be a source of sustained competitive advantage. To do so, resources have to meet the following attributes: valuable, rare, inimitable and non-substitutable also called the VRIN attributes (Eisenhardt and Martin, 2000). Resources supporting the firm to employ strategies, which improve its effectiveness and efficiency, are valuable. They can be considered as rare, when the number of companies in position of that particular valuable resource is less than the amount of companies

needed to create perfect competition in that industry (Barney, 1991). Imperfect imitability results from one or the combination of several isolating mechanisms. This can be economies of scale, historical uniqueness, social complexity and causal ambiguity (Bharadwaj, 2000). Causal ambiguity is defined as the "basic ambiguity concerning the nature of the causal connections between actions and results" (Lippman and Rumelt, 1982, p. 420). Non-substitutability requires that there is no equal valuable resource in the market, which themself is either imitable or rare (Barney, 1991). Firms are able to sustain the advantage for additional time periods as long as they manage to protect the resource against imitation and substitution (Barney, 1991; Wade and Hulland, 2004). Those long-term competitive advantages provide the firm with above normal returns and a strong overall firm performance (Amit and Schoemaker, 1993). As mentioned previously, resources are of fundamental nature for business models. Apparently, the value of a business model increases while its resources and capabilities are inimitable, less substitutable as well as more productive with ongoing utilization (Amit and Schoemaker, 1993; Amit and Zott, 2001; Peteraf, 1993).

4 Case Contexts and Research Methodology

4.1 Research Methodology

By investigating business model components and their resource configurations of professional online social networking sites, we strive to expand existent literature with drivers of success for electronic business models in the social networking site context. Therefore, we employ an interpretive stance and a multiple case study approach. As interpretative scholars we try to understand phenomena by exploring the subjective and intersubjective meanings of participants when they interact with their environment (Walsham, 1995). Hence, we acknowledge that our predefined beliefs, interests and values shape our investigations (Darke et al., 1998). We are aware that scholars conducting interpretative case studies can make use of prior theory. However, we shall not use existing theory in a rigid way, as the threat exists to only see what theory suggests (Walsham, 1995). The interpretive stance in combination with our multiple case study approach enables us to deeply understand social networking sites in their 'messy' context and does not involve manipulation or explicit control of variables (Darke et al., 1998). Additionally, having the chance to collect data in two unique cases of professional social networking sites (LinkedIn and Xing) supports us in studying the phenomenon in different settings (Darke et al., 1998) and enables comparison and cross case analysis. As a unit of analysis we choose the business model (Zott et al., 2011). It provides a set of "seed categories" to structure our analysis. We combine the case study approach with grounded theory for data collection and analysis (Halaweh et al., 2008).

Given the limited number of companies that can be deeply investigated, the selection of cases should follow a strategy in order to meet the research objective. According to the technique of theoretical sampling we select two cases for their differences as well as their similarities (Eisenhardt, 1989; Glaser and Strauss, 1967; Orlikowski, 1993). LinkedIn and Xing apply a similar type of business model (i.e. SNS). This ensures a similar substantive area that can be replicated or extends emergent theory (Eisenhardt, 1989). However, with one company being the global player (LinkedIn) and market leader, whereas the other company (Xing) is a solid local player, both distinguishes in their market reach and performance. Furthermore, both firms implement multiple revenue models, which provide us a broad base for our analysis.

The process of data collection spanned from January to September 2012. We collected data from numerous data sources. These sources contained SEC filings, observations, documentation as well as a total of 17 unstructured and semi-structured interviews (Eisenhardt, 1989; Glaser and Strauss, 1967; Orlikowski, 1993) with the founders, early investors, and top managers or former top managers of both firms who were active during the first years after the foundation of the firms and therefore are deeply knowledgeable. We follow the suggestions of Schultze and Avital for qualitative interviewing (2011). Our questions were structured according to the business model components (Details on the questions asked during the interviews can be obtained through the first author. Numbers behind each quote are referring to the specific source where it was drawn from in these details). After each interview we took notes and memos to adhere what was learned (Corbin and Strauss, 1990). These notes provided initial ideas. Based on these ideas new ideas we refine our interview agenda during the process of data collection and analysis, leading from more general questions to more specific ones. Consequently, by using theoretical sampling, new informants were added to either challenge or confirm emerging patterns. In a further step we clustered the categories and structured them among the components of our business model framework. They represent factors enabling superior performance and thus competitive advantage of electronic business models. We follow the three

coding stages (open, axial, and selective) suggested by Corbin and Strauss (1990) to abstract and develop the drivers of competitive advantage as categories. In the last phase of the analysis we connected the categories with existing theoretical concepts from literature (Orlikowski, 1993). We have been very concerned to achieve a high quality data analysis process and hence carefully adhere to the principles of interpretative research by Klein and Myers (1999).

4.2 Case Contexts

LinkedIn

LinkedIn is one of the largest SNS and the largest professional SNS on the Internet with nearly 200 Mio registered members in almost every country of the world. The platform is the market leader among other professional social networking sites around the globe, offering members the opportunity to manage and create their professional identity, interacting with their personal network, finding business opportunities and sharing knowledge and insights (LinkedIn Corporation, 2011). The company has been founded 2003 in California, USA. It was co-founded by Reid Hoffman, a Silicon Valley serial entrepreneur and venture capitalist, and founding team members (Allen Blue, Konstantin Guericke, Eric Ly and Jean-Luc Vaillant). The platforms main focus is on its members. Most of LinkedIn's services are offered free of charge. The free membership provides all features to interact with the personal network, whereas the premium accounts (starting around $30 per month) target mainly users acting on behalf of their enterprises. Until their IPO in 2011 the company relied heavily on funding. In the year of their IPO LinkedIn reported $522 Mio net revenues and 60 percent growth of registered members compared to 2010. Since 2008 Jeff Weiner is the CEO of LinkedIn. He and his management team come from prominent Internet players (such as Google, Yahoo and PayPal), all with strong records in this industry (LinkedIn Corporation, 2011).

XING

Xing, formerly know as openBC, is an online social networking platform where professionals are able to connect. The platform's purpose is to build and maintain relationships to other professionals, but also private contacts. It was founded in 2003 by Lars Hinrichs and and is broadly used in the German-speaking region. In 2012 the platform has about 12 Mio users, with approximately 800.000 premium users. The main focus is on the German speaking markets (Austria, Germany and Switzerland). Here, they have around 5.5 Mio users with 765.000 paying members (XING AG, 2011). Xing is one of several online-based social networking sites. The free of charge basis-membership has limited functionalities compared to the premium membership. Premium members have to pay a fixed amount of around 5€ per month. It provides certain added features such as an advanced search function, unlimited messaging or statistics. Until 2010 the basic membership was highly restricted. Basic members were not able to write messages to other members on their own initiative and they could not post status updates, to name a few restrictions (XING AG, 2011). Xing's headquarter is located in Hamburg, Germany. On December 2006 the company went public. Their IPO was the first of its kind for a Web 2.0 company in Europe. Shortly after going public, in 2007, they changed their name from OPEN Business Club to Xing (Open Business Club AG, 2006). With 29.7 Mio shares their current major shareholder is Burda Digital. A company owned by the Hubert Burda Media operating mainly in the media business (XING AG, 2010). Since 2011 the company is listed in the German stock index for technology companies (TecDAX). In the same year they made 66.2 Mio € in revenues, which is a growth of 22% compared to the previous year (XING AG, 2011).

5 Results

While LinkedIn and Xing both apply very similar business models, characteristics and implementation of both professional social networking sites vary to some extent. Table 1 offers an overview on the different key drivers and barriers. Due to space limitations, we select and highlight the most important findings from the table and discuss them in the light of existing literature and through a RBV lense below.

5.1 Infrastructure Management

5.1.1 Management Team and Human Resources

At the heart of the business model are internal resources. Their associated value increases when the resources are valuable, more difficult to imitate and less transferable (Amit and Zott, 2001). The management or respectively founding team is one of them.

… as he [Lars Hinrich] is a good networker, possessing a superior network of many people, we quickly had a few thousand members on the platform. His friends passed the network on to their friends. Lars principle was "I do not do business with my friends, but with the friends of my friends" (I3).

	Category	Xing	LinkedIn
Infrastruct. Man. (5.1)	Management Team	+ Mix of people + Networks – Experience (wrong decisions)	+ Strong experience + Networks + Late management
	Engineers		+ Founding team + Silicon Valley as talent pool
	Investors	+ Business angels	+ Raised high amount of funding + Experience
	Location of a Firm		+ Silicon Valley
Financials (5.2)	Revenue Model	+ Good monetization	+ Revenue strategy – Relatively late profitable
	Premium Membership	+ Pioneer + Biggest source of revenue – Distribution, inhibited growth	+ Solid source of revenue + A lot of free services
	Advertising and eRecruiting	+ Both rising – eRecruiting released too slow	+ Advertising solid / promising + eRecruiting highest earnings
Value Proposition (5.3)	Value Provided to Customers	+ Early market entry + Local focus – Reputation: Costs money	+ Early market entry + Focus on people, not platform + Market leader
	User Experience	+ High activity – Privacy issues	+ Reliable, essential features + Excellent online relationships + Privacy – Not very active (early days)
	Global Presence	– No presence anymore – Germanic feel – Too early market entry	+ Best global coverage + Good market share in countries with local competitor
	Competition	+ Distinguish with localness – UE increased competition – No adoption to competition	+ Good market position + Gain customers from competitors
Customer (5.4)	User Base	+ Broad and loyal (DACH) + Active, above competition	+ Largest user base + Highly international
	Network Externalities	+ Early critical mass + Interesting people – No top management (privacy) – Premium membership – No international presence	+ High quality of users + Focus on people + Growth in the fore (late monetizing)
	User Acquisition	– Bad timing (too early) – Membership costly – No scalable process	
	Distribution Channel	+ Pioneer online + Early mobile site	+ Pioneer online

Table 1. Summary of Findings: Key Drivers and Barriers

In both cases analyzed, the network of the founders yielded a competitive advantage. First, they offered the company further internal resources such as managers, partners and investors. Second, they gave the social networking site a good head start. By inviting their personal networks to the platform, a critical mass of inter-

esting people developed quickly, making it attractive to other users. Here, it should be emphasized that reaching a critical mass is related to social context rather than technology (Jones et al., 2004; Schilling, 2002). The importance of the network of the founders is consistent with existent literature relating economic value to social networks (Granovetter, 2005). The central idea of strategic network theory that network configuration is linked to value creation, further supports our findings (Amit and Zott, 2001). Besides their individual networking skills, the management-team's experience plays a crucial role. Particularly the founding team, but also the later management team of LinkedIn is equipped with solid experiences in the Internet and the online social networking industry. With their experiences, they helped the company to make the right decisions that led to LinkedIn's success (e.g. the relationship design on the platform or the revenue strategy). A proper business model design is partially considered "art" and requires profound understanding of user needs. The routines by which managers modify their resource base in order to yield new value and hence competitive advantage is a clear microfoundation of dynamic capabilities – the seizing, sensing and reconfiguration of skills that keeps the organization in synch with changing market needs and which empowers it to change the business environment (Eisenhardt and Martin, 2000; Teece, 2010). Finding managers and founders possessing such networks and experience is hard, especially in the fast moving Internet industry. They provide a lot of value to the platform, are rare, non-substitutable as well as inimitable. The RBV argues that it is in many cases the heterogeneous distribution of such resources and capabilities that provides one organization an advantage over the other (Barney, 1991; Schilling, 2002).

5.1.2 Investors and Funding

In addition, the amount of funding is vital for the business model's success. On the one hand, the amount of monetary assets decides about further resources that can be acquired, on the other hand it is important for the overall design of the business model.

…funding is the number one, no, the primary driver of innovation (I1).

The cases of LinkedIn and Xing (the first relying heavily on funding, the second depending on operating revenues) demonstrated well the impact of funding on the business model's revenue strategy. While LinkedIn could focus on growing their platform, Xing had to earn operational profits. With their later IPO Xing was also able to acquire a strong amount of monetary resources. However, until then the company already had the reputation as a platform you need to pay for and being publicly listed further increased their pressure to earn revenues.

I think that LinkedIn raised a decent amount of capital. And so could focus on building out the network without having to focus on revenue. That was absolutely key, if we had to focus on revenue earlier we would not have grown at the rate as we did. That was important (I11).We [Xing] went to the stock exchange, because we were able to. This was due to the fact that we made a pile of money. At the same time this money making machine went at the cost of growth, which takes revenge today (I5).

The cases of Xing and LinkedIn showed that besides the amount of funding itself, the time the business receives funding also matters. Business models that receive funding get visibility. Hence, with early funding the business can operate more focused and enjoy more attention from outside. Next to investors' money their experience counts. It is about the investors' experience to see the potential in a business model and accordingly adjust support and funding. LinkedIn's investors build a good example. They provided the company with a decent amount of funding and meanwhile did not push them on earning revenues too early. Solid investors are at least as hard to find as an appropriate management team. Thus, the amount of funding and their experience can also provide the business model with a competitive advantage according to the VRIN requirements (Eisenhardt and Martin, 2000).

5.1.3 Location

In the course of our analysis it became obvious that the location of a firm plays an influential role for the infrastructure management and value proposition component. It is an important factor for strong resources, as it offers access to them. Our two cases provide good examples for the environment's impact. LinkedIn (located in the Silicon Valley) is able to attract a high amount of employees with the necessary Internet and entrepreneurial business skills, as well as skilled engineers and investors specialized on Internet investments. It is much more difficult for Xing (located in Germany) to do the same. However, the location is not only about resources. In the case of the Silicon Valley, the density of successful Internet companies provides good visibility, which positively influences a company's value proposition.

Basically we had the wrong strategy. If we knew what was going to happen, we would have moved the entire operation into the Silicon Valley immediately and spent all of our time to get into the local network there… Why move to the Valley? The same reason Willy Sutton robbed banks - it's where the money is. And, yes, talent flocks to money and the combo of talent and money continues to make the Valley the uber-hub. (I6)

This is why we recognize it as a competitive advantage according to the RBV (Barney, 1991). There is no other comparable environment in the world providing so many necessary resources for Internet business models as the Valley. The dominance of the Silicon Valley in the new economy has been recognized by other scholars relating its importance to factors such as mobilization of resources, networks, and collective learning (Saxenian, 1991) and still seems to be of major importance for digital enterprises.

5.2 Financials

With its *revenue strategy* a company tries to extract value out of its business model. The decision for a certain revenue strategy is dependent on the firm's resource position. Our cases analyzed work as an excellent demonstration for the companies' strategic financial decisions and their consequences. Both apply a similar business model, but differ in their monetizing efforts. As mentioned above Xing had fewer resources available than LinkedIn. Consequently, they decided for a monetization strategy.

There are two different kinds of strategies. The one is MEG and the other GEM. GEM stands for "Growth, Engage, Monetize" and MEG for "Monetize, Engage, Growth". Xing was always the MEG candidate, whereas LinkedIn the GEM (I5).

The revenue strategy's impact on the firm's performance becomes obvious with the implementation of the respective revenue models. With its premium subscription Xing generated a lot of revenue, which could balance missing funding. However, the premium membership increased barriers to join Xing. It affected the network's value proposition and hence inhibited its distribution. One of their managers stated:

I like the picture of a professional social networking site as a moving wheel. On this wheel you can attach a dynamo. Facebook is an excellent example. Here the network is running and the dynamo is the advertising model. They have a big wheel with a small dynamo attached to it, whereas the premium model slows down the wheel and makes it smaller. This is the negative effect of the premium membership (I5).

LinkedIn's management was aware of this and had the necessary resources available to pursue their growth strategy. They invested most of their resources in the free basis product in order to increase conversion rates. In addition, their biggest revenue stream "Hiring Solutions" goes hand in hand with the platform's network externalities and does not decrease them. So, their network was able to develop more and more value. LinkedIn's strategic moves are consistent with existing literature stating that the utility in a network increases with each user (Katz and Shapiro, 1985). This is particularly the case for social networking sites that experience high network externalities. LinkedIn's co-founder Reid Hoffman mentioned:

The first thing you have to do in consumer Internet is how do you get distribution? How do you get a business that is going to scale and getting big? And then the question is can you convert that to a good, economic, valuable ecosystem (I12).

Besides a revenue model's general characteristics, the timing to introduce them appears to be related to its success. With their premium membership Xing benefited from a first mover advantage (Lieberman and Montgomery, 1998), which helped the company to gain a leading position regarding monetization of professional social networking sites. Even 9 years after its launch, premium subscriptions are still Xing's most important source of revenue.

Their premium membership was really a huge success for them. Other social networks tried to do what they did, but they haven't been successful. Xing was first. They were first to do that. They made money even before LinkedIn made money. Xing was at the right place at the right time (I1).

Our data shows that this is also true for LinkedIn. With its "Hiring Solutions" the company recognized a market need early on. They have been a pioneer, successfully positioning between headhunters and classic job boards. As for Xing the premium membership, LinkedIn's eRecruiting solutions are their major source of revenue. Although eRecruiting has the advantage that it leverages the platforms network externalities rather than decreasing them. *The value inside the network enables LinkedIn to monetize in different ways. The fact that the focus was initially on creating the network and then thinking about monetizing afterwards has been a big part for the company's success from a revenue perspective (I11).*

5.3 Value Proposition

The users' decision to join a network is influenced by their expectations, as well as the reputation of the social networking site (Katz and Shapiro, 1985; Kauffman et al., 2000). In addition to the platform's revenue strategy, the user distribution, quality and quantity impact the value proposition. The notion of value is located at the center of the business model concept. It aims at explaining how value is created, added and exchanged (Amit and Zott, 2001; Hedman and Kalling, 2003). Professional social networking sites possessing a critical mass of quality users radiate a promising value proposition and hence gain from positive network externalities. LinkedIn's founders brought the platform early with a large amount of interesting users. The early users increased network externalities, which let the platform grow. This is also true for Xing. The difference between the cases is that with a growing amount of users, LinkedIn's user experience offered its members necessary privacy, whereas Xing's did not provide adequate privacy features.

… they had the problem that the open DNA of the platform soaked the exclusive club atmosphere. This resulted in mangers getting contacted by interns. Hierarchies that exist in a real word setting did not exist anymore in this online world (I5).

The design of a superior user experience is, as the revenue strategy, also dependent on the combination of resources as well as capabilities forming available resources to a competitive advantage (Eisenhardt and Martin, 2000). User experience or respectively the feelings a person associates with a social networking site influence network externalities. In our data analysis we could recognize the strong importance of network externalities for the success of a professional social networking site. This is due to their nature: The subscribers' value increases with each new user, resulting in a "winner takes it all" situation (Viswanathan, 2005):

… all niche communities that have been small and tried to build a successful business model failed. Name me one that is successful. This consolidates strongly to one network and is at the end a classical winner takes it all market (I5).

LinkedIn early recognized the significance of network externalities for their success. Its management emphasized the importance for growth and invested most of their resources in distributing their platform. Positive network externalities are dependent on a lot of different factors. They cannot be copied nor barely be substituted. Therefore, they are able to offer a firm a sustainable competitive advantage according to the RBV (Barney, 1991). In both cases we recognized that the firm's value proposition influences network externalities. But further to the value proposition itself, the impact of its timing is also interesting. LinkedIn and Xing were the firsts entering their respective markets. This brought them tremendous growth. It was important for both companies to be the pioneer in order to promote the value proposition and to gain visibility. Hence, they developed the professional social networking site standard in their local markets, and in the case of LinkedIn even beyond (Lieberman and Montgomery, 1998). However, Xing's market entries abroad did also demonstrate that entering too early, before customers are aware of a product's values, decreases the organizations probability to survive. Hence, a firm must find the ideal 'window of opportunity' (the moment customer requirements exist) and immediately enter a market (Schilling, 2002).

5.4 Customer

All kinds of social networking sites rise and fall with their users, who provide value to the network (Timmers, 1998). As previously mentioned the user base is strongly dependent on network externalities, but also on the founders' personal networks. The founders' personal networks work as an initial starting point, triggering network externalities. We recognized this phenomenon in both of our cases. By inviting their personal networks Xing's and LinkedIn's platform grew and consequently provided more value to other users. This is consistent with existing literature stating that a social networking site's value is positively correlated with a rising user base (Sledgianowski and Kulviwat, 2009). Next to quantity our data showed that user quality and their distribution also increases the value of the user base. Particularly in the case of LinkedIn we could see that the quality of users was crucial. Furthermore, their good global coverage becomes more and more beneficial.Besides its impact on the value proposition, a broad user base can also positively contribute to the given revenue model(s). The amount of users and their willingness to pay can positively impact revenues. In the German-speaking region Xing gained from customers with good paying attitudes. This fostered their business model. However, abroad customers did not possess these attitudes. They have not been willing to pay for Xing's services, resulting in a low adoption of their platform. On the contrary, LinkedIn waited on revenues

until its network developed to a certain size and global coverage. This brought them a highly valuable user base, good to monetize.

We mounted the most difficult part [talking about growing the user base]. The making money part is much more straightforward, because there is so much utility as we have that network (I13).

Users provide value to a network and hence are highly critical to its success. As our data demonstrate the acquisition of users is a complex process influenced by a lot of different factors. They cannot be imitated nor be substituted. Therefore, they provide a social networking site's business model with a sustainable competitive advantage according to the RBV (Barney, 1991).

6 Interpretation and Limitations

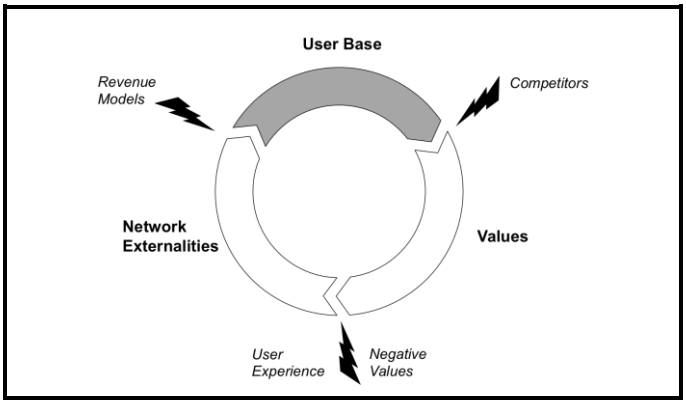

Figure 1. The User Wheel: A Virtuous Cycle

Our data depict different examples for the significance of the user base. It is, for instance, hard for a new player to win customers in a market with a competitor already possessing a critical mass. It requires the necessary stamina to break through the dominance of an existing player. Xing's acquisitions abroad demonstrated that even with solid monetary means it is not easy to gain users. Rather they have to be convinced by strong values. Early on LinkedIn focused their resources on growing its user base. While their user base is growing the value for customers rises. This is comparable to a magnetic wheel that increases its power (value) with each new user. Hence, as long as this mechanism is not intervened from outside, this virtuous cycle is able to develop more power (value) attracting further users (cf. Figure 1). Interventions that break the cycle can occur through factors such as revenue models (e.g. premium membership), competitors, user experience, and negative values (e.g. low data privacy, negative press). With such a self-reinforcing virtuous cycle a technology might be able to achieve an almost insurmountable competitive advantage, resulting in a winner-take-all market (Schilling, 2002). LinkedIn's founders, as well as their later management, did well in protecting their wheel (social networking site) from being interrupted. As a result they became the global market leader among professional social networking sites with positive future prospects. One of their founders stated: *The strategy we saw with LinkedIn was that it is a winner takes it all market. Once you have several networks competing and most of the people are at one network that is usually the network people will move to (I13).*

When interpretating our results it is important to keep in mind possible limitations. Since we are using an interpretive qualitative stance, we do acknowledge that reality is socially constructed an all collected data is subject to human interpretation. Interpretive case research does not strive for statistical generalization (i.e. a large number of cases) or unbiased results but rather strives for understanding phenomena in their specific contexts and learning from the world views and interpretations of actors involved in a specific situation (Charmaz, 2006; Flyvbjerg, 2006; Orlikowski, 1993; Walsham, 1995).

7 Conclusion

This study is one of the first that attempts to investigate drivers of success of social networking sites business models from a resource-based perspective and hence provides a more in-depth view of the business model framework. We use an interpretive multiple case study to address both the empirical and theoretical gaps in the IS and strategy literature. Our sample consists of two prominent professional social networking

sites. Their business models are the unit of analysis for our case study (Amit and Zott, 2001). We have been able to explore interesting findings providing important theoretical implications for business model research. Especially the revelations about the impact and interdependencies of founders, funding and network externalities on strategic decisions and therefore the success of a company offer new reference points for further investigations. Also the importance of the location of a firm, especially in the area of digitization is surprising. Finally, the ongoing discussions on privacy issues are reflected in our cases as well and pose an important driver of a company's success that should be further investigated in future works. However, the study does not claim to offer absolute theory about the success factors of Internet business models. We rather believe that it provides tendencies and propositions (Walsham, 1995). Hence, the study contributes to existing literature in terms of a "Type1" theory, where the method of grounded theory evokes a specification of categories of interest. They exceed mere descriptions of a phenomenon by analyzing or outlining its salient attributes. Such theories are notably valuable "when little is known about some phenomenon" (Gregor, 2006, p. 624), as it is the case in our study. By highlighting essential success factors and their interrelationships for professional social networking sites' business models, we offer valuable contributions "to the process of initial theorizing" (Sarker and Sarker, 2009, p. 458).

References

Al-Debei, M. M., Avison, D. (2010). Developing a Unified Framework of the Business Model Concept. European Journal of Information Systems, 19 (3), 359–376.

Amit, R., Schoemaker, P. J. H. (1993). Strategic Assets and Organizational Rent. Strategic Management Journal, 14 (1), 33–46.

Amit, R., Zott, C. (2001). Value Creation in E-Business. Strategic Management Journal, 22 (6-7), 493–520.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17 (1), 99–120.

Bharadwaj, A. S. (2000). A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation. MIS Quarterly, 24 (1), 169–196.

Boyd, D. M., Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication, 13 (1), 210–230.

Casadesus-Masanell, R., Ricart, J. E. (2010). From Strategy to Business Models and onto Tactics. Long Range Planning, 43 (2-3), 195–215.

Chang, Y. P., Zhu, D. H. (2011). Understanding Social Networking Sites Adoption in China: A Comparison of Pre-Adoption and Post-Adoption. Computers in Human Behavior, 27 (5), 1840–1848.

Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. Pine Forge Press.

Corbin, J. M., Strauss, A. (1990). Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. Qualitative Sociology, 13 (1), 3–21.

Darke, P., Shanks, G., Broadbent, M. (1998). Successfully Completing Case Study Research: Combining Rigour, Relevance and Pragmatism. Information Systems Journal, 8 (4), 273–289.

Doganova, L., Eyquem-Renault, M. (2009). What Do Business Models Do? Research Policy, 38 (10), 1559–1570.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. The Academy of Management Review, 14 (4), 532–550.

Eisenhardt, K. M., Martin, J. A. (2000). Dynamic Capabilities: What Are They? Strategic Management Journal, 21 (10-11), 1105–1121.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. Qualitative Inq., 12 (2), 219 –245.

Glaser, B. G., Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Aldine, New York.

Granovetter, M. (2005). The Impact of Social Structure on Economic Outcomes. The Journal of Economic Perspectives, 19 (1), 33–50.

Gregor, S. (2006). The Nature of Theory in Information Systems. MIS Quarterly, 3 (30), 611–642.

Halaweh, M., Fidler, C., McRobb, S. (2008). Integrating the Grounded Theory Method and Case Study Research Methodology Within IS Research: A Possible "Road Map."

Hedman, J., Kalling, T. (2003). The Business Model Concept: Theoretical Underpinnings and Empirical Illustrations. European Journal of Information Systems, 12 (1), 49–59.

Jones, Q., Ravid, G., Rafaeli, S. (2004). Information Overload and the Message Dynamics of Online Interaction Spaces: A Theoretical Model and Empirical Exploration. Information Systems Research, 15 (2), 194–210.

Katz, M., Shapiro, C. (1985). Network Externalities, Competition, and Compatibility. The American Economic Review, 75 (3), 424–440.
Kauffman, R. J., McAndrews, J., Wang, Y.-M. (2000). Opening the 'Black Box' of Network Externalities in Network Adoption. Information Systems Research, 11 (1), 61–82.
Klein, H. K., Myers, M. D. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. MIS Quarterly, 23 (1), 67–93.
Liang, T.-P., You, J. J. (2009). Resource-based View in Information Systems Research: A Meta-Analysis.
Lieberman, M. B., Montgomery, D. B. (1998). First-Mover (Dis) Advantages: Retrospective and Link with the Resource-Based View. Strategic Management Journal, 19 (12), 1111–1125.
Lin, H.-F. (2008). Determinants of Successful Virtual Communities: Contributions from System Characteristics and Social Factors. Information & Management, 45 (8), 522–527.
Lin, K.-Y., Lu, H.-P. (2011). Why People Use Social Networking Sites: An Empirical Study Integrating Network Externalities and Motivation Theory. Computers in Human Behavior, 27 (3), 1152–1161.
LinkedIn Corporation (2011). LinkedIn Form 10-K (Annual Report) 2011. Retrieved 12. April, 2012, from http://investors.linkedin.com/secfiling.cfm?filingID=1193125-12-94556.
Lippman, S. A., Rumelt, R. P. (1982). Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency under Competition. The Bell Journal of Economics, 13 (2), 418–438.
Mislove, A., Marcon, M., Gummadi, K. P., Druschel, P., Bhattacharjee, B. (2007). Measurement and Analysis of Online Social Networks. In 29–42, ACM Press.
Open Business Club AG (2006). OPEN Business Club AG Annual Report for the Shortened Financial Year 2006. Retrieved 28. April, 2012, from http://corporate.xing.com/fileadmin/image_archive/ir_en_OPEN_Business_Club_AG_Annual_report_2006_english.pdf.
Orlikowski, W. J. (1993). CASE Tools as Organizational Change: Investigating Incremental and Radical Changes in Systems Development. MIS Quarterly, 17 (3), 309–340.
Osterwalder, A., Pigneur, Y., Tucci, C. L. (2005). Clarifying Business Models: Origins, Present, and Future of the Concept. Communication of the AIS, 15 (1), 1–25.
Pateli, A. G., Giaglis, G. M. (2004). A Research Framework for Analysing Ebusiness Models. European Journal of Information Systems, 13 (4), 302–314.
Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. Strategic Management Journal, 14 (3), 179–191.
Sarker, S., Sarker, S. (2009). Exploring Agility in Distributed Information Systems Development Teams: An Interpretive Study in an Offshoring Context. Information Systems Research, 3 (20), 440–461.
Saxenian, A. (1991). The Origins and Dynamics of Production Networks in Silicon Valley. Research Policy, 20 (5), 423–437.
Schilling, M. A. (2002). Technology Success and Failure in Winner-Take-All Markets: The Impact of Learning Orientation, Timing, and Network Ext. Academy of Management Journal, 45 (2), 387–398.
Schultze, U., Avital, M. (2011). Designing Interviews to Generate Rich Data for Information Systems Research. Information and Organization, 21 (1), 1–16.
Sledgianowski, D., Kulviwat, S. (2009). Using Social Network Sites: The Effects of Playfulness, Critical Mass and Trust in a Hedonic Context. Journal of Computer Information Systems, 49 (4), 74–83.
Steininger, D. M., Huntgeburth, J. C., Veit, D. J. (2011). Conceptualizing Business Models for Competitive Advantage Research by Integrating the Resource and Market-Based Views. In Detroit, Michigan.
Teece, D. J. (2010). Business Models, Business Strategy and Innovation. Long Range Planning, 43 (2-3), 172–194.
Timmers, P. (1998). Business Models for Electronic Markets. Electronic Markets, 8 (2), 3–8.
Viswanathan, S. (2005). Competing Across Technology-Differentiated Channels: The Impact of Network Externalities and Switching Costs. Management Science, 51 (3), 483–497.
Wade, M., Hulland, J. (2004). Review: The Resource-Based View and Information Systems Research: Review, Extension, and Suggestions for Future Research. MIS Quarterly, 28 (1), 107–142.
Walsham, G. (1995). Interpretive Case Studies in Is Research: Nature and Method. European Journal of Information Systems, 4 (2), 74–81.
Wernerfelt, B. (1984). A Resource-Based View of the Firm. Strategic Management Journal, 5 (2), 171–180.
XING AG (2010). XING AG Annual Report 2010. Retrieved 28. April, 2012, from http://corporate.xing.com/fileadmin/user_upload/XING_AG_full_year_results_2010.pdf.
XING AG (2011). XING AG Annual Report 2011. Retrieved 28. June, 2012, from http://corporate.xing.com/fileadmin/image_archive/XING_AG_full_year_results_2011.pdf.
Zott, C., Amit, R. (2010). Business Model Design: An Activity System Perspective. Long Range Planning, 43 (2-3), 216–226.
Zott, C., Amit, R., Massa, L. (2011). The Business Model: Recent Developments and Future Research. Journal of Management, 37 (1), 1019–1042.